Wattstopper®
Wireless Input/Output Control Node

No: 25197 – 10/16 rev. 1

Installation Instructions • Instructions d’Installation • Instrucciones de Instalación

Catalog Number • Numéro de Catalogue • Número de Catálogo: WIO-12

Country of Origin: Made in China • Pays d’origine: Fabriqué en Chine • País de origen: Hecho en China

DESCRIPTION

The WIO-12 is a configurable wireless control node, using wireless 2.4GHz technology by NXP. The WIO-12 has four universal inputs (supporting temperature, resistance, voltage, and current), two Digital/Binary inputs (contact closure), four Digital/Binary Relay outputs, and two Analog Outputs. The controller features a Real Time Clock (RTC) and backup battery (optional: CR2032, not included).

This document covers mounting, wiring, and initial startup of the WIO-12.

BEFORE INSTALLATION

1. Unpack the WIO-12.
2. Inspect the device for missing/broken pieces/components.
3. Read all instructions prior to use.

Included in this package
• WIO-12 Wireless Input/Output Control Node
• 2 – 8 Position Connectors
• 2 – 4 Position Connectors
• 1 – 2 Position 7.5mm Power Connector
• 1 – 2dBi Antenna, RPSMA
• 6 – 500Ω Resistors

Safety Instructions

The following instructions are general guidelines for proper installation of the device. Any question should be directed to Wattstopper prior to installation. It is the responsibility of the installer to ensure local, state, and federal codes are followed.

1. Disconnect all power prior to installation.
2. Make all connections in accordance with local and national electrical codes.
3. This device is used for monitoring and control, not intended for life and safety applications.
4. Discharge any static electricity prior to handling the device.
   Static discharge produces voltages high enough to damage electronic components.
   Do not handle the bare printed circuit board without proper protection against static discharge.

MOUNTING

The devices can be mounted in any orientation, as long as vertical polarity is maintained with the antenna. Fixed antenna devices must be mounted with the antenna vertically positioned.

Mounting on a 1.4” (35mm) wide DIN Rail is recommended. If DIN Rail mounting is impractical or not possible, screws in the mounting tabs may be used. Remove all connectors on the bottom side of the controller prior to mounting via DIN Rail. Use a small flat-tip screwdriver to pull down on the plastic locking clip, and push the controller base onto the DIN rail and release. Ensure the controller is mounted securely.

WIRING

1. Prepare power wiring with the included 7.5mm pitch power connector. Please ensure proper polarity with 24VAC/DC.
2. Connect I/O wiring accordingly, following the directions on the I/O labels.
3. Connect 24VAC/DC power only after all I/O terminations are completed.

WARNING: TURN THE POWER OFF AT THE CIRCUIT BREAKER BEFORE WIRING.

WARNING: If 24VAC power is used, a separate isolated transformer is required.
INPUTS/OUTPUTS

**Universal Inputs** can support any of the following:

- Type 2 Thermistor (xxx_Ai2T)
- Type 3 Thermistor (xxx_Ai3T)
- Digital Input (xxx_AiDi)
- Resistance Input (xxx_AiOhm)
- Milliamp Input (xxx_AiAmp)
- Voltage Input (xxx_AiVolt)

These different input types are packaged in their own kit to improve memory management. For Ai2T, Ai3T, AiDi, and AiOhm, the DIP Switch for each input must be in **Resistance** position. For AiAmp and AiVolt, the DIP Switch for each input must be in **V/mA** position.

**Digital/Binary Inputs** support dry contact closure.

- xxx_Di

The digital input is packaged in its own kit to improve memory management.

**Analog Outputs** support both milliamp and voltage outputs,

- xxx_AoAmp (0-20 mA + 0-10%)
- xxx_AoVolt (0-10 VDC + 0-10% via a 500Ω shunt resistor placed across the output)

These different output types are packaged in their own kit to improve memory management.

**Digital/Binary Outputs** command a normally open 5A relay.

- xx_Do
  - 277VAC resistive @ 5A
  - 30VDC resistive @ 5A
  - 277VAC inductive @ 1A

The digital output is packaged in its own kit to improve memory management.

REPLACEMENT PARTS

For replacement parts or RMA, please contact Wattstopper Support for information: 800-879-8585.

FCC STATEMENT

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.